thrombosed. Patient died a week after the resection of the jugular. Dr. Graham spoke of pneumococcus infection. When I saw this second case I suspected a pneumococcus infection, but it turned out to be a streptococcus. I have found that frequently streptococcus is mistaken for pneumococcus by the bacteriologist. We should get our bacteriologists to appreciate the differentiation between pneumococcus and streptococcus, especially the streptococcus capsulatus mucosus.

SOME OPINIONS CONCERNING TONSIL SURGERY.*

By C. C. STEPHENSON, M. D., Los Angeles.

It is not my intention to discuss this question from a strictly scientific viewpoint, neither do I intend persecuting you with a "text book paper," but after a long experience in doing eye, ear, nose and throat work, I have some opinions concerning tonsil surgery which I believe to be well founded, and so firmly convinced am I of the correctness of these opinions, that I do not hesitate in presenting them to this Society as my convictions, without adding thereto, or subtracting therefrom. (And this is my only excuse for afflicting you with my presumptions.)

We all have our notions about the different discoveries connected with the practice of medicine and each is entitled to his or her opinion in proportion to having tried them out. I mean by having tried them out that it has been done thoroughly, and a conclusion not reached until one is satisfied that every detail that has the least connection with same, or bearing either directly or indirectly, has been carried out. Then one is entitled to arrive at conclusions and form opinions according to results obtained, without bias or prejudice.

I will of necessity have to say something concerning the operation for the complete removal of the faucial tonsil, but only mention the technic in a general way, and as this paper will consider the enucleation of the tonsil to the exclusion of all other tonsil surgery, this will be meant throughout the entire discussion of the subject under consideration. My first experience with the tonsilotome disgusted me with negative results, or I perhaps had better say, imperfect results. I soon laid this instrument aside forever. A search through the pages of many instrument catalogues for an improvement or substitute failed to show anything satisfactory. For a time I used a Skeenes one-half curved uterine scissors, with a Wright's nasal dressing forcep for seizing, which proved to do better work than the tonsilotome. I had Meyrowitz, of New York, to make a scissors and seizing forcep which I liked very much, until the snare made its appearance, and then I did the ecrasement operation. When the knife came on the stage seeking favors, I then began using this instrument to the exclusion of all others, and at the present writing I am still an advocate of the knife, yet I feel that the Sluder operation has many advantages.

Briefly stated, I endeavor to enucleate without a break in the capsule. This I frequently can do, but in some cases I am not so successful and either cut through the capsule, or do not quite reach it; yet I will say that this does not happen often. I remove the right tonsil first and thus my field of operation for the left is unobscured by bleeding, as my patient lies with right side of face downward. After seizing the tonsil firmly with a fixation seizing forcep, I use a Pierce pillar knife to separate the adhesions, being careful to avoid cutting the superior constrictor muscle of the pharynx. The cutting is carried all around, freeing the gland from lower border of the lower lobe up to the supratonsillar fossa. Both pillars are freed and a blunt dissector is carried all around, and the tonsil is pulled forward enough to draw it well out into the throat, and is then cut off with a right tonsil knife. Hemorrhage is controlled before any effort is made to begin the removal of the left gland. This I do by saturating a sponge with Ochner's solution, which is composed of acetanilid, alcohol and water, and placing it between the pillars and using firm pressure with my forefinger, and just here I will say that I have never as yet seen any tonsil hemostat that I consider so effective and satisfactory as my finger in the control of the immediate bleeding following an enucleation of a tonsil.

So much for these few words of operative explanation. Now, the opinions that I entertain I will present with as much brevity as will be consistent with a clear understanding of what I wish to say. I rather suspect, however, that these opinions may be at variance with those of some who are present with us to-day. If your views do not coincide with mine, kindly accord me the same rights of belief as those you entertain. On the other hand, if you endorse what I say—or a portion of this paper—will thank you for an expression, which I trust that you will give with the same frankness that you would otherwise use in a criticism.

I believe that a tonsillectomy is as severe, and should be classed in point of gravity, the same as an appendectomy. With this view in mind, I shall deal with my questions as being of equal importance as those of appendectomy, and will endeavor to present my arguments as concisely as possible.

First: All hypertrophied tonsils without lesion or grave complications should be removed.

Second: All tuberculous tonsils with lesions should be treated medically and never surgically.

Third: All tonsillectomies should be performed under general anesthesia, unless the condition of the patient is such that a general anesthetic would be dangerous.

Fourth: All tonsillectomies should be hospital cases—i. e., the operation should be performed in a hospital.

Fifth: All tonsillectomies should be followed by the passage of an adenoid curette.

Sixth: All curettages following a tonsillectomy should be followed by the passage of the finger.

* Read before the Forty-Second Annual Meeting of the State Society, Del Monte, April, 1912.

Seventh: The hot wire ecraseur should never be used.

Now, I have made seven declarations which I grant are somewhat extreme, but let us investigate the grounds upon which I shall build up a defense, and see if they are reasonably sound. In the beginning of my consideration of this subject, I acted on a saying of Solomon in the book of Proverbs: "In the multitude of councillors there is safety." So I wrote letters to quite a number of the leading men in their respective fields of work, and requested them to do me the kindness to answer the questions propounded, with permission to quote their replies in my paper. In these letters I stated that I desired that they be answered from the viewpoint of the surgeon, internist, pathologist, physiologist, pediatrist and neurologist; that is, I wanted their opinions from their experiences in their several differing and individual branches. (I enclosed a stamp for reply, but some did not show the courtesy that customary usage demands; so I regret that I am unable to give their replies.) I shall not attempt to discuss the replies that I received, as no doubt but few, if any, are in attendance, and I would not be so unfair as to take advantage of their absence by entering into a consideration of their letters. I only asked permission to quote their views in my paper. These letters I will read to you later, just as received, and leave their ideas for you to consider and digest.

First. Why do I say that all hypertrophied tonsils without lesion or grave complication should be removed? Hypertrophy as defined by Dorland, is the "morbid enlargement or overgrowth of an organ or part." Please note the qualifying adjective, "morbid." Therefore the acceptance of this definition would of itself be a justification for the advocating of enucleation. If a tonsil is normal, it is not hypertrophied. If it is hypertrophied, it is morbid, or diseased. Disease is any variation from the normal standard, and is a condition characterized by the occurrence of definite phenomena and constituting a recognized type of abnormality. Therefore in the hypertrophy of the faucial tonsil, there is a diseased condition which must be dealt with; the question then is, how shall we deal with it? To be sure, if a general diseased condition is present, carrying with it a hopeless prognosis, and there is a hypertrophied tonsil as a characteristic; such as the enlarged tonsils in leukemias, or in the hemophyliacs; or of the tuberculous, where the tonsils are ulcerating; I wish it to be understood that I do not mean that I include these types. I mean to deal with that class of hypertrophied tonsils where the enucleation promises to cure, and prevent future disturbances, and not those where an operation would apparently precipitate a fatal termination in an already doomed individual.

Removal then is curative and prophylactic. It is curative in that a diseased gland is disposed of by removal, and drainage of the debris of the mouth with infecting bacteria that might be present has been prevented from discharging polluting material into the chain of cervical lymphatics and bronchial glands, and lastly poisoning the blood stream with all kinds of infecting material. The tonsil as a portal of infection is therefore a menace no longer after enucleation. It is prophylactic in that it insures as well as assures against the likely train of troubles that a hypertrophied tonsil always promises.

Who will say that a hypertrophied tonsil that is at the present time quiescent, will not in the future hold in its crypts sufficient tubercle bacilli, Klebs-Leffler, or other bacteria to overwhelm the unfortunate possessor of these glands to intoxication? There is not a practitioner within the sound of my voice who will not admit the risk of provoking disastrous results by thus courting such danger. If you hold out to such a one a future free from all calamity, to my mind you are assuming a responsibility that you are not justified in doing. In advocating the enucleation, you are on the safest side, and you shift the responsibility to the patient. Then you cannot be blamed for anything that the future may develop as a result from these breeders of trouble.

November, 1910, I enucleated a tuberculous tonsil from one of the leading practitioners of Los Angeles, and no longer than February this year I removed the right tonsil from a Los Angeles contractor, who is 58 years old. This tonsil was enormously hypertrophied, and he gave a history of repeated attacks of recurrent tonsillitis with a decided impairment of his hearing on that side. The other tonsil was removed years ago with no subsequent annoyances following. The tuberculous case recovered rapidly from the operation, but went down with a general tuberculosis shortly afterward. The tonsils were filled with numberless tubercle bacilli. Suppose that the tubercle bacilli in the tonsils had been disseminated, would not this case have been overwhelmed? Would any physician feel satisfied in recalling that he refused to interfere in these two cases years ago had they presented themselves for advice? I am happy to say that the tuberculous case has entirely recovered. Such cases are familiar to all of us. So long as the house does not burn, the insurance money is not needed. One might be said to be applying for insurance when seeking advice concerning hypertrophied tonsils. Your decision then should be only for removal or insurance. Dangerous possibilities from these breeders of trouble, as I choose to call hypertrophied tonsils, are innumerable, whereas with proper enucleation there is safety from impending probabilities. But why dwell on this? Every man engaged in doing throat work knows that the danger comes from the live tonsil and not from the one that is in a preserving fluid. I might go through the catalogue of possible troubles arising from hypertrophied tonsils before enucleation, but none after.

Second. It is wholly unnecessary for me to discuss the enucleation of tuberculous tonsils, as the most mediocre practitioner understands or should understand the dangers of infecting a cut surface; and no trained physician would undertake to remove a tubercular tonsil in an ulcerating condition, but same should be treated medically.

Third. I say that all tonsillectomies should be performed under general anesthesia, unless the condition of the patient is such that a general anesthetic would be dangerous. Why should an operation be performed under general anesthesia? First of all, to have complete control of the patient, so that the work can be done thoroughly. Some of you may contend that local anesthesia will act just as well. Is it not as safe to use general anesthesia as cocaine, which absorbed and carried into the general blood stream may produce cocaine intoxication? Aside from this danger, the shock to the nervous system' under local anesthesia is a thing with which we have to reckon. Three months ago I operated a woman in my office who has nerves of steel. Ether and cocaine were explained to her fully and she chose the latter. The shock to her nervous system confined her to bed for ten days. In the past this woman had had four or five operations under general anesthesia, none of which were followed by a nervous breakdown. To my mind then a general anesthetic is much to be preferred.

Fourth. All tonsillectomies should be hospital cases, that is, the operations should be performed in the hospital. In making this statement I realize that I will encounter much opposition, as no doubt many of the gentlemen present perform this operation either in their office or at the residence of the patient; in doing this, to my mind, they either sacrifice a few dollars or convenience or safety of the patient. The need of the hospital is very apparent in cases that result unfavorably where we have bleeders or trouble following a general anesthetic. Who is to say this case will or will not bleed? Who will say this case will result disastrously from an administration of an anesthetic, or will be perfectly safe? For these reasons alone I insist that all these cases should be hospital cases, for when we need a tank of oxygen, we need it. In other words, when hospital facilities are required there can be no delay.

Fifth. In discussing fifth, one cannot be positive as to whether there is a small amount of adenoid tissue present or not, as in some cases a small amount is sufficient to occlude the post nasal space. I am not discussing those cases of adenoids where all the symptoms are plain enough to be recognized without difficulty, therefore one can never make a mistake in passing the curette after all tonsillectomies, as it does no harm, and to my mind the operation is incomplete without the post nasal space being cleared of any tissue that might be there.

Sixth. There is very little to be said in reference to the 6th proposition. Following the passage of the curette the finger should be passed in the post nasal space, as in some cases fibrous bands of adhesions will radiate from the cushion of the eustachian tube and become attached to the posterior pharyngeal wall or to Rosenmuller's fossa. In passing the finger we break down these fibrous bands that bind the cushion of the eustachian tube which prevents its mobility.

Seventh. There is really nothing to be said in discussion of the 7th declaration, as no one I know of to-day uses the hot wire ecraseur. The only objection to the use of the hot wire is the cicatrix following, which is really more annoying to the patient than the tonsils removed by it. I have said nothing concerning the probable effects on the voice following a tonsillectomy for the simple reason that it is more of a bugaboo than a reality. In all my experience I have never had a case that was followed by even the slightest change in a vocal tone.

I now have the pleasure of presenting to you the letters which I have received on this question, which I will read to you verbatim.

Discussion.

Dr. Kaspar Pischel, San Francisco: I would like to ask Dr. Stephenson what he considers a normal tonsil. As it is probable that the tonsil has some function I have only removed the diseased tonsil. While in children a general anesthetic is necessary, in grown people I prefer local anesthesia, thus avoiding the additional danger of general anesthesia. I apply cocain on the surface but inject alypine which is so much less poisonous; the patients have always assured me that they did not suffer any pain and I never had any difficulty in stopping the bleeding. After loosening the tonsil all around I cut the stump with a hot snare, which causes less hemorrhage than the cold snare.

Dr. Franklin's method of suturing I consider a good one; I suture in every case, thus avoiding hemorrhages and diminishing the field of infection.

Dr. Cullen F. Welty, San Francisco: I have convictions as well and will start with my indications for tonsillectomy: 1. All cases of hypertrophied tonsils. 2. Recurrent acute inflammation of tonsil. 3. Chronic inflammation of tonsil. 4. Peritonsillar abscess. 5. Acute otitis when not associated with an infectious disease. 6. When hearing is impaired due to obstruction of the Eustachian tube; other things to be done as well. 7. Inflammation of the cervical glands. 8. In cases of rheumatism, especially when associated with sore throat. 9. In recurrent exacerbation of heart lesions, chorea, etc. 10. In cases that have recovered from lung tuberculosis, as the chances are largely in favor of tubercle bacilli being present in tonsil to predispose to another attack. 11. In cases that are under weight, otherwise healthy; most of these cases have gained weight following tonsillar enucleation. 12. Cheese deposits can be pressed from tonsils that otherwise look healthy. This comprises an incomplete list which can be multiplied very easily by more careful thought.

The whole hemorrhage proposition is based almost entirely upon your operative technic. A case should never leave the table oozing—all bleeding must be stopped by ligature, suturing of pillars, with or without sponge. Should you use a sponge, rub plenty of vaseline into it so that it will come away easily the following day and not a drop of blood will be lost. However, I prefer a curved needle with 00 catgut to be sure that my ligature will not slip. I can say to substantiate my statements that I have been called to the hospital for bleeding about three times in a series of one thousand cases, and some of these were due to faulty technic.

It is not just to liken a tonsillectomy to an appendix operation, as a tonsillectomy carries with it practically no responsibility as to the outcome of the case and appendix operations are sometimes followed by death; such cannot happen with a trained throat surgeon.

Dr. Louis C. Deane, San Francisco: If it were

the lot of a number of rhinologists to relate their various methods for tonsillectomy it would become a discussion marked by great differences in operative technic. The present operation came to us as a procedure of some surgical importance lifted from the scorn of the old tonsillectomy and so each man, without precedent and in his own way, proceeded to remove tonsils completely and in their capsule. It is these discussions that bring us to some uniform method, extracting therefrom the best and safest devices.

The question of anesthetics must first attract our attention. At first the hospital interne or family physician was called upon but of late the importance of this matter has compelled us to recognize the greater safety and facility of operating when a trained and experienced anesthetist is engaged.

As to the removal of tonsils under local anesthesia, I must say that my experience has not been so bad as those related by the readers of the last two papers. One factor of some importance to relieve the patient of pain when operating under local anesthesia is to avoid pulling upon the tonsil with the retracting forceps as this draws upon the deeper and unanesthetized tissues upon the neck and pain is produced there, extending to the shoulder.

I have used Dr. Sewall's mouth gag and it certainly gives a splendid view of the throat but the depressor being in the median line has to be so depressed that the pillars are drawn down upon and are far more liable to injury by cutting or tearing. I prefer an assistant who, using the tongue depressor of Welty's design, drawing the tongue away from the tonsil being operated upon; he also has a hand free for sponging, which is an assistance and saving of time where the operator attempts to do it himself. An important thing in tonsillar operations is not to damage the pillars; I use blunt dissectors in the form of the closed blades of a Holmes nasal scissors, attempting to clip only such landmarks as the anterior and posterior carona above, the plica triangularis below and such tough adhesions as resist the blunt instrument. Great care should be exercised in separating the superior portion of the posterior pillar as great palatine deformities can follow careless manipulation in this region.

It is interesting to note the various opinions expressed here regarding the stitching of the pillars. Two of the gentlemen do so largely as a routine practice, while another never, except in extreme emergency. I am opposed to plugging the tonsillar fossa or stitching the pillars for the following reasons: First, you retard the growth of normal granulation tissue which is apt to leave some deformity. I have seen a marked difference in the two sides after I have plugged one side for hemorrhage. Secondly, you have wounded and possibly tear the delicate pillars. Thirdly, the plug comes away in two days, foul smelling, retaining in proximity to the wound any pathogenic material that might have been thrown off. Fourthly, in my experience of some six years with this operation I have only in a very few cases found plugging necessary to check a hemorrhage. I prefer the hemostat and suture. In the past three years I have painted the tonsillar fossa, following the removal of the tonsil, with nitrate of silver 10%; this acts as a styptic, antiseptic and escharotic.

Dr. Wm. F. Blake, San Francisco: There is a great diversity of opinion as to how tonsillar hemorrhage should be handled. There is also a great diversity of opinion as to whether the bleeding comes from the fossa or from the tonsil pillars and also whether it is arterial or venous in origin. I agree with Dr. Welty that any man who considers himself a nose and throat specialist should be able to remove tonsils properly. This much should be accepted as a matter of course.

I believe that after a tonsil has been properly removed with as little sacrifice as possible of the mucous membrane adjacent, that in the majority of cases the bleeding is venous in origin and the bleeding point most frequently lies in the very bottom of the fossa. Not infrequently we will cut in some places a little outside the capsule of the tonsil and in incidents like this where the vein is cut off it will bleed from both ends. To me, the proper method of handling hemorrhages of this nature is to take a pair of long, slim artery forceps and grasp the exact points of bleeding, and then with a small needle threaded with 00 catgut, pass a suture below the bleeding point and tie. This seems to me the most surgical procedure and results in less bruising of the tissues than excessive sponging.

Dr. C. G. Stivers, Los Angeles: My experience as a surgeon has led me to believe that our patients ought to demand and do demand the same right to general surgical principles being applied to their cases as in cases of appendicitis operations, and therefore if the operation can be done under an anesthetic which will minimize the injury to the tonsillar pillars, it should be used. I think these cases should be placed under general anesthesia. There are a great many San Francisco men here and it might be interesting to them to hear the general procedure that is in use with the Los Angeles surgeons. I have heard nothing in the discussion to-day in regard to operative measures where the finger dissection is used. Several men have mentioned the use of the knife for the purpose of freeing the tonsil. The general procedure of many of our surgeons in Los Angeles is to use the knife only to make the first incision at the junction of the tonsillar pillar and the capsule; that is made wide enough for the index finger to be inserted between the pillar and the tonsil, and the tonsil is freed in this way. It is mostly done with the finger. The knife is seldom used after the first incision.

Dr. Harrington B. Graham, San Francisco: I take issue with Dr. Stephenson with regard to a remark he made about the removal of tonsils that are tuberculous. I think that where there is no doubt about there being tuberculous tissues present that we are much better off if we remove it for we will get better healing of the surrounding parts. In regard to anesthesia, I would like to call your attention to a new anesthetic that is being used in New York City for nasal and tonsillar work. I have used it in a number of instances with marked success. It lasts for three days and means a great deal for the comfort of the patient and it is a thing well worth trying. I refer to urea and aninine hydrochlorid ¼% solution. Another method of anesthesia I have used satisfactorily is the blocking the nerve; by this means I have had in several instances complete anesthesia lasting for 24 hours. In Cooper College we are compelled to use local anesthesia at times. There we have had no severe tonsillar hemorrhages and we do from five to a dozen enucleations per week. Whether this is due to the method of enucleation used there or to the preparation beforehand I am not prepared to say.

Regarding Dr. Sewall's mouth gag, that has been a great success and only requires a little study and intelligence; no instrument is fool proof. With this gag there are some difficulties and if the anesthetist holds the gag he will have to learn those difficulties and learn to overcome them.

Dr. E. W. Alexander, San Francisco: I wish to warn against tonsillectomies, or at least advise caution, in cases with enlarged thyroids and evidence of hypertrophy or diseases of the thymus; also where acidosis is present. Such cases frequently have hypertrophied tonsils and lymphatics and take the anesthetic very poorly.

Post operative hemorrhage is almost always due

to sloughs. These are due to incomplete removal of tonsils or to devitalized tissue. In controlling the hemorrhage I have found the methods advocated by Dr. Blake thoroughly and uniformly satisfactory. If the exact bleeding point is picked up, and the hemostat allowed to remain on until the opposite tonsil is removed, it will be found that the bleeding is controlled in the majority of cases; if not, a catgut ligature will be perfectly safe. I think the reason for Dr. Franklin's late hemorrhage might have been that he included more tissue than was necessary in his ligature, resulting in a slough.

Dr. Geo. W. McCoy, Los Angeles: I find the chief objection to the removal of tonsils in the adult under local anesthesia is the pain, because of which I use general anesthesia much more frequently. Hemorrhage gives little trouble. By placing the patient on the edge of the table with mouth lower than throat the field keeps clear enough for continual procedure. In private cases after seeing the bleeding stopped on the table, I examine the throat after the patient has been taken to bed before I leave the hospital, and give instructions to the nurse as to the symptoms of hemorrhage.

Dr. C. C. Stephenson, Los Angeles: Answering Dr. Pischel's question I will say that a normal tonsil is one that presents no abnormal phenomena, and that the purpose of the tonsil is one of defensive action, but when it is hypertrophied that defensive action is destroyed. Regarding the question of the responsibility of the nurse, I always give the nurse on these tonsil cases sufficient instructions to properly attend the patients. Nitrate of silver I never use, because it coagulates the albumin and builds a wall, making it possible for the working of pathogenic bacteria from behind this wall. I have never used my finger to shell out a tonsil but one time, and if the young lady patient forgives me I will never do so again.

Dr. W. S. Franklin, San Francisco: Regarding the remarks of Dr. Pischel about general anesthesia I will say in tonsillar work he will sooner or later come across a case which will necessitate a forced hurry to the hospital, the giving of a general anesthetic and tying the vessels. If one has had the experience of seeing the patient bleed and bleed, profusely from the mouth, spitting, hacking and coughing every minute and interfering with our efforts to stop the hemorrhage, he will admit that the sight is by no means a beautiful one. He will decide that general anesthesia is preferable to such a procedure.

Regarding the remarks made by Dr. Welty I cannot agree with him at all. He seems to have had better luck than almost any of us. The blood vessels have been separated and when you cut a tonsil transversely you are going into a certain part of the throat where you will get bleeding. In regard to the separation of the posterior pillar I do not do that for reasons of hemorrhage, but because it is not necessary technically. As to the question of using the sponge in the mouth; after a man has used the sponge often he will find that it will become adherent to the tissues when he tries to remove it the next day. In one case I left a sponge in the throat for 5 days because I could not remove it and when I did remove it the stench that came from it was terrible.

I believe that when local anesthesia is indicated these cases should be operated upon in the operating room of a hospital for I object to operating within an office where the facilities are not proper for treating a bad case.

Speaking of Dr. Sewall's mouth gag, it is a very satisfactory instrument only it is necessary that it be used properly. With this gag the tongue can be held most satisfactorily. When the tongue is held by an assistant it is never held consecutively for 2 minutes in the same place.

Regarding the use of nitrate of silver on the fossa, I do not believe in this procedure. Regarding the sewing of the pillars, this is a fine subject to speak upon theoretically. It would be very well not to sew the pillars if you got perfect results when you did not sew the pillars. In many cases the deformity is no greater after proper approximation of the pillars than it is when they have been allowed to granulate.

Dr. Blake is correct when he says that the bleeding points are as a rule at the bottom of the fossa. The method of separating the tonsils with the fingers is not an original one, it having been used by the ancient Romans, and to my mind the finger is not as accurate as an instrument. In regard to hemorrhage under local anesthesia, it is a fact that you cannot control it. I do not want you to think that every one of my cases bleed and that I never have cases that go smoothly and nicely. An important point in the prevention of post operative hemorrhage is to never allow a portion of the tonsil to remain. Post operative hemorrhage is due to the fact that the tonsillar wound is an infected wound and if it was not infected during the time of operation it has become infected from the bacteria that are constantly present in the throat.

REVIEW OF RECENT ITALIAN EYE LITERATURE.*

By VICTOR F. LUCCHETTI, M. D., San Francisco.

In reviewing the Italian eye literature of the last few months, I have avoided citing new and important cases, as well as statistics, but have confined myself to those articles which showed original investigation, and could, therefore, contribute new facts and theories to our ophthalmic literature.

MODIFICATION OF GUERIN'S OPERATION OF BLEPHAROPLASTY.

To the converging incisions which are proper to this operation, M. Roselli, of Rome, adds two oblique diverging incisions to the former, starting from the point of their union. By a dissection of the flaps corresponding to the new incisions, and by the secondary suturing of these elevated flaps, Roselli has obtained a number of advantages for the definite restoration of the inferior lid.

THE CYCLOPIC IMAGE AND THE PLAIN MIRROR.

In the field of physics an article appears by Prof. Ovio, in which he offers a plausible explanation for the so-called cyclopic image.

In looking into a plain mirror from a distance of one meter, the following occurs: The image of the face appears double, one superimposed upon the other, showing the reflection of a large face with three eyes. If one continues to gaze for a short while into the mirror, the two extreme eyes of the vision will suddenly disappear, and an elongated image of the face with a single eye will remain; a veritable image of a cyclops. This

* Read before the Eye, Ear, Nose and Throat Section of the San Francisco County Medical Society, June 25, 1912.